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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/806,453 | 03/23/2004 | Takashi Ozawa | Q80636 | 1790 |

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| EXAMINER |
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KLEMANSKI, HELENE G

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| ART UNIT | PAPER NUMBER |
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1755

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/806,453 | OZAWA ET AL. | |
| | Examiner | Art Unit | |
| | Helene Klemanski | 1755 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-7 and 9-12 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1, 2, 10 and 11 have been amended, claim 8 has been deleted and no new claims have been added. Hence, claims 1-7 and 9-12 are pending in the application.
2. The 112, second paragraph rejections to the claims as set forth in the previous Office Action dated November 21, 2005 have been overcome by applicants amendments and are now withdrawn. A new 112, second paragraph rejection is entered below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is considered vague and indefinite since it is dependent upon a canceled claim. The examiner assumed applicants wanted claim 9 to be dependent upon claim 1 and examined as such. Please clarify.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-7 and 9-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 8-11, 13, 15, 18, 20 and 24-26 of copending Application No. 10/503,894 (US 2005/0178288). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-7 and 9-11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 9-14 of copending Application No. 10/807,442 (US 2004/0200385). Although the conflicting claims are not identical, they are not patentably distinct from each other

because the claims of the present application are generic to said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In the above copending Application Nos. 10/503,894 and 10/807,442, it is the examiner's position that it would have been obvious to one having ordinary skill in the art that when any two ink (or three) in the ink set are mixed, the dyes would not precipitate since the dyes of copending Application Nos. 10/503,894 and 10/807,442 are the same structure as those claimed by applicants.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-5, 7, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kabalnov (US 6,261,350).

Kabalnov teaches an ink jet ink set comprising cyan, yellow, magenta and black inks wherein each ink contains at least one water-soluble dye and surfactant vesicles. The dyes may be used in various salt forms such as sodium, potassium, lithium and ammonium. The cyan ink may contain a phthalocyanine dye such as Direct Blue 199 (i.e. blue dye of the formula as claimed by applicants). Kabalnov further teaches that

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the dyes do not precipitate from the solution in a crystalline form, but form a soft gel that is absorbed by a substrate and provided a uniform coverage. Kabalnov also teaches that dye precipitation at the surface is undesirable since this creates poor printing on the substrate. See col. 4, lines 12-35, col. 6, lines 15-30, col. 9, lines 20-25 and lines 64-66, col. 10, lines 1-14, examples 1 and 2, Tables IV-IX, example 20 and claims 1, 3 and 24. The ink set as taught by Kabalnov appears to anticipate the present claims.

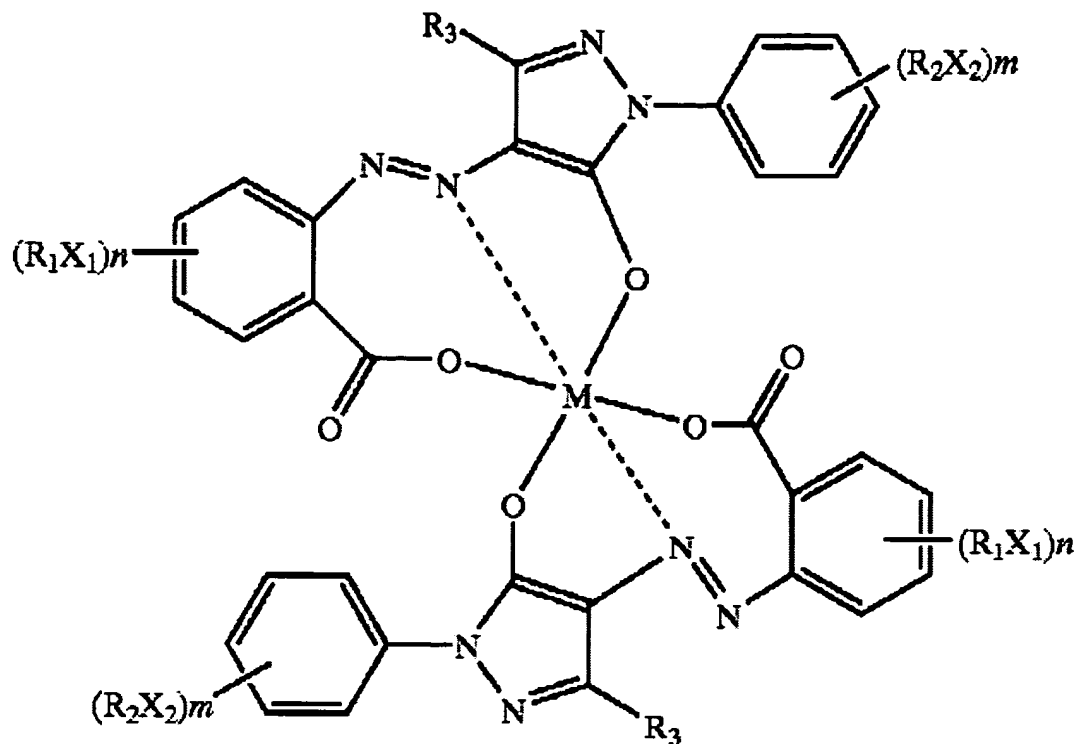
Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 2, 4, 5, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al. (US 2004/0163568).

Berger et al. teach a yellow ink jet ink composition comprising a metallized azo dye or salt thereof of the formula



wherein M is a metal; R_1 and R_2 each independently is a solubilizing group such as sulfonate and carboxylate (i.e. anionic groups); R_3 is selected from the groups consisting of alkyl, cyano, COOH and CONH₂ and X_1 and X_2 each independently is a counterion such as an alkali metal and a vehicle such as water. Berger et al. further teach an ink jet ink set comprising at least the above yellow ink, a cyan ink and a magenta ink wherein the dyes are selected so as to ensure that the dyes do not interact adversely with each other after they have been printed onto a receiver surface (i.e. do not precipitate). See para. 0005, paras. 0009-0016, paras. 0032-0033, para. 0039 and para. 0043. Berger et al. fail to specifically exemplify an ink jet ink set as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific ink jet ink set as claimed by applicants as Berger et al. also discloses the use of these ink sets but fails to show an example incorporating them.

Response to Arguments

12. Applicant's arguments filed April 20, 2006 have been fully considered but they are not persuasive.

Applicants argue that copending Application No. 10/503,894 does not contain a mixture of two or more dyes or that the dyes must be anionic dyes. The examiner disagrees since the dyes of copending Application No. 10/503,894 would mix upon printing onto a substrate (i.e. mixture of dyes) and the dyes are the same dyes as claimed by applicants (see the formulas of the dyes as disclosed in the specification of copending Application No. 10/503,894) containing sulfonate or carboxylate groups. Page 11 of applicant's specification defines anionic groups as sulfo, carboxyl and phosphono groups. Therefore, since the dyes of the above copending Application contain these groups they are anionic (see example of dyes in applicants specification). Furthermore, it is the examiner's position that no precipitation would occur between the dyes after printing since the dyes are the same as those as disclosed by applicants.

Applicants also argue that copending Application No. 10/807,442 does not teach that the dyes must be anionic dyes. The examiner agrees that copending Application No. 10/807,442 does not specifically state that the dyes are anionic however, they are the same dyes as disclosed by applicants (see the formulas of the dyes as disclosed in the specification of copending Application No. 10/807,442) containing sulfonate or

carboxylate groups. Page 11 of applicant's specification defines anionic groups as sulfo, carboxyl and phosphono groups. Therefore, since the dyes of the above copending Application contain these groups they are anionic (see example of dyes in applicants specification).

Applicants further argue that the Kabalnov reference does not disclose a dye having an anionic group and at least two heterocyclic groups. The examiner disagrees since Kabalnov specifically teaches the use of Direct Blue 199 which is an anionic dye (i.e. contains sulfonate groups; see above arguments) and has four heterocyclic groups in the phthalocyanine skeleton. Therefore, since Direct Blue 199 contains sulfonate groups the dye is anionic containing at least two heterocyclic groups.

Applicants lastly argue that the Berger et al. reference does not disclose a dye having an anionic group and at least two heterocyclic groups. The examiner disagrees since the R₁ and R₂ substituents of the above metallized dye each independently are a solubilizing group such as sulfonate and carboxylate (see above arguments) and the formula contains two heterocyclic groups. Therefore, the metallized dye of Berger et al. is an anionic dye containing at least two heterocyclic groups. Accordingly, this action is final.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

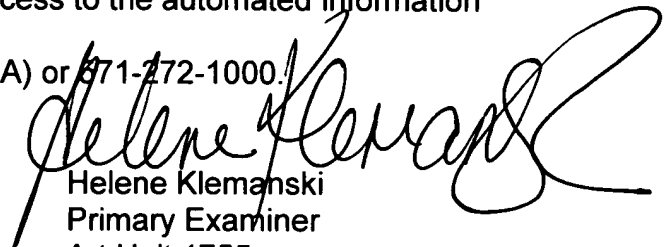
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Helene Klemanski
Primary Examiner
Art Unit 1755


HK
June 28, 2006